

COPY

WATER SAMPLING RESULTS

from the

22nd Street Property
Chicago, Illinois

Submitted to:

Northern Trust Company
Chicago, IL

Prepared by:

MAECORP Incorporated
Homewood, Illinois

October 9, 1988

Project No. IL-A021

EPA Region 5 Records Ctr.



229811

Background

On September 2, 1988, MAECORP traveled to the Stack Property, 22nd Street, Chicago, Illinois, at the request of Mr. Mark Hale of Northern Trust Company. The objective of the project was to obtain a representative sample of discolored liquids discharging from a culvert located in a ditch approximately 100 yards from the street. The sample was to be analyzed for U.S. Environmental Protection Agency priority pollutant parameters.

Site Conditions

At the time of the sampling, the culvert was not discharging. A pool of stagnant water had collected in the ditch beneath the outfall. The water was a metallic blue in color and a distinct septic/organic odor was noted.

Sampling Method

The sampling method utilized grab sampling procedures with matrix obtained approximately 2 inches below the water surface. Two one-gallon glass containers, three 40 ml VOA vials with teflon septa, and one one-quart jar were filled, labeled, packed on ice, and transported to Gulf Coast Laboratory in University Park, Illinois, for analysis.

Laboratory Results

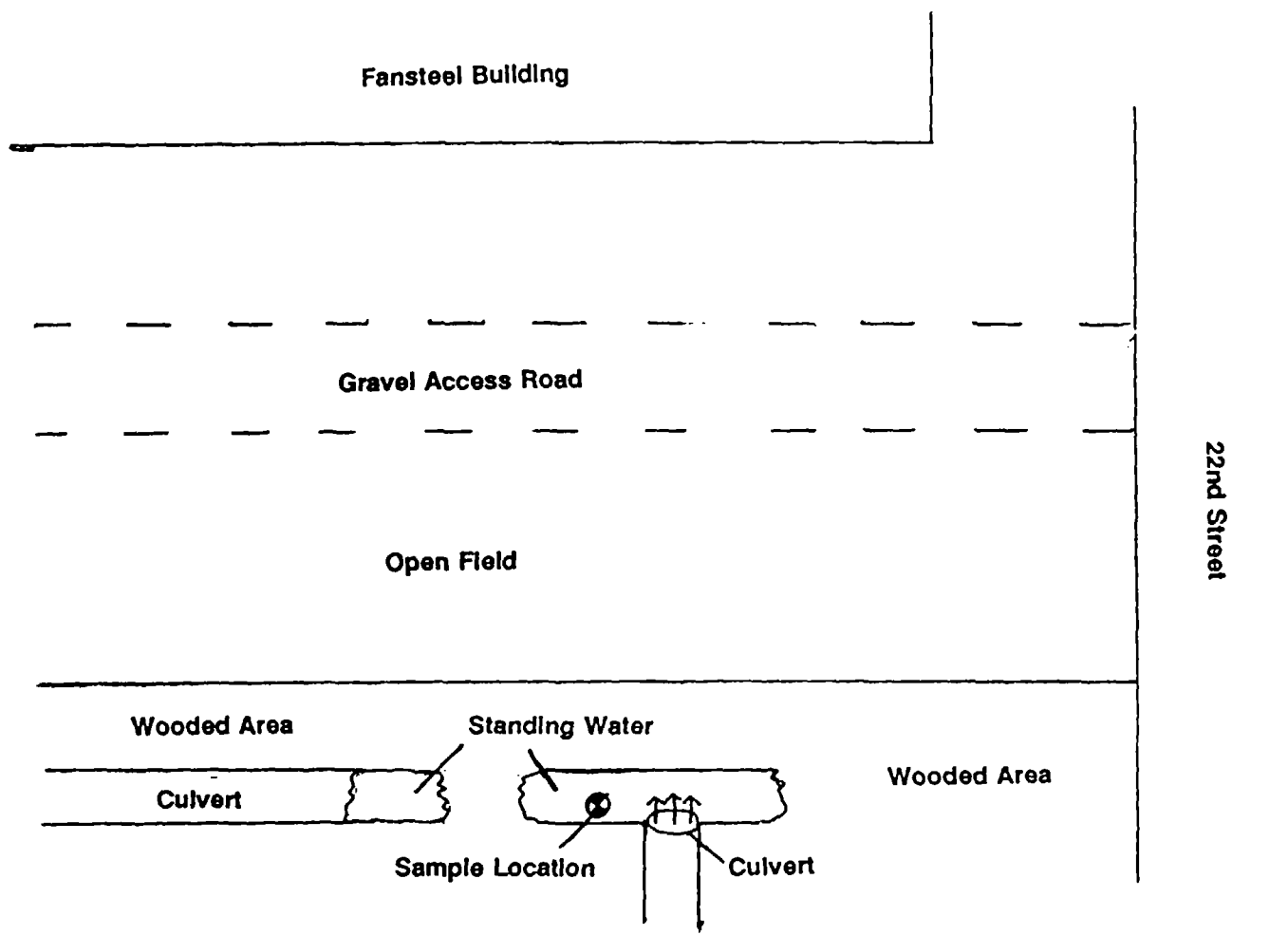
Based upon results from Gulf Coast Laboratories to MAECORP on October 5, 1988, all parameters on the priority pollutant list were non-detectable at the methods' specified limits except for:

<u>Parameter</u>	<u>Concentration</u>
Zinc	0.084 ppm
Methylene Chloride	54 ppb
Acetone	25 ppb
1, 2 - Dichloroethene	52 ppb
1, 1, 1 - Trichloroethane	5 ppb
Trichloroethene	19 ppb
Phenols	0.014 ppm

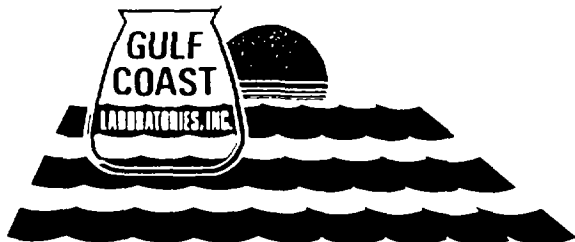
Other parameters were identified, but below detection limits. Several unknown parameters were noted. These results are noted in the attached laboratory data with "J" and/or "B" qualifiers. The most significant item consisted of an unknown organic parameter at 80 ppb with a 9.43 minute column retention time.

Summary

The laboratory data suggests that the sampled matrix was fairly clean relative to its visual discoloration. The elevated known and unknown volatile organic species are of some concern as they appear to have migrated from the site to an easily accessed location.



Site Sketch		
SCALE: None	APPROVED BY: <i>Kwy</i>	DRAWN BY <i>DCK</i>
DATE: 10-12-88		REVISED
MAECORP Incorporated		
Stack Property, 22nd St., Chicago, IL		DRAWING NUMBER IL-A021



COPY
GULF COAST LABORATORIES, INC.
2417 Bond St., University Park, Illinois 60466
Phones (312) 534-5200 (219) 885-7077 (815) 723-7533

October 5, 1988

Mr. Fred Walker
MAECORP, Inc.
17450 South Halsted Street
Homewood, IL 60430

Dear Mr. Walker:

Please find enclosed the analytical report for the water sample submitted to Gulf Coast Laboratories for analyses. It was identified as follows:

CLIENT ID	GCL#	SAMPLE DATE	DATE RECEIVED
Waste Water from Stream Sample #ILA021	139455	09/02/88	09/06/88

If you have any questions, please contact our laboratories.

Sincerely,

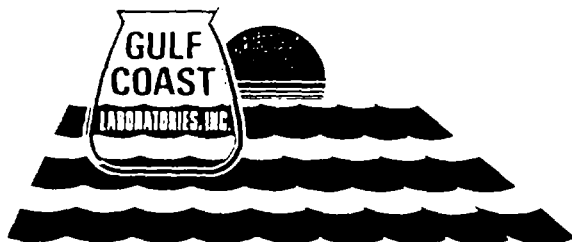
WESTON/GULF COAST LABORATORIES

John Boudreau

John Boudreau
Lab Manager

JB/sj

Enclosures



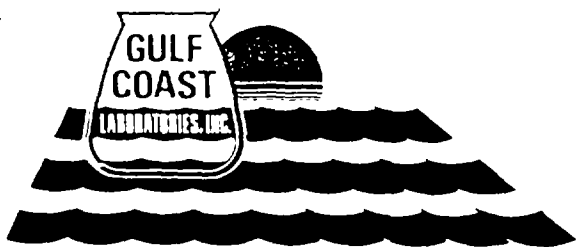
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The following is a list of flags that Gulf Coast Laboratories frequently uses on our analytical reports. All flags may not be applicable for the enclosed reports.

- A - Indicates a condensation product.
- B - Indicates the compound was found in the blank as well as the sample.
- C - Pesticide compound confirmed by GC/MS
- d - Result is on a dry weight basis
- D - Indicates the compound was identified in an analysis at a secondary dilution factor. If a sample is re-analyzed at a higher dilution, the "DL" suffix is appended to sample numbers.
- e - Concentrations exceed calibration range of the instrument for that specific analysis.
- E - Severe matrix interference
- J - Indicates an estimated value which is below detection limit
- P - Peaks present but do not appear to be PCBs
- R - Spike recovery not within control limit
- S - Indicates value determined by Method of Standard Addition
- U - Indicates compound was analyzed for but not detected
- W - Result is on an "as is basis" (wet weight)
- BDL - Below Detection Limit
- NA - Not Applicable
- NR - Not Required
- * - Duplicate not within control limits
- + - Correlation coefficient for MSA < 0.995
- @ - Due to matrix interference, post analytical spike is out of control limits.
- X - Result by calculation



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ANALYTICAL REPORT

COPY

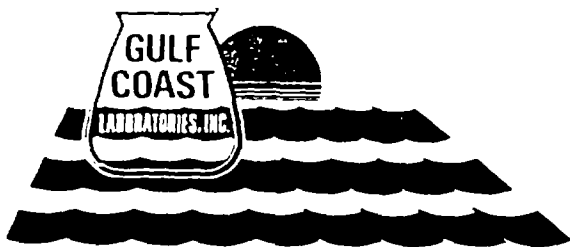
TO: MAECORP, Incorporated
17450 South Halsted Street
Homewood IL 60430

DATE: 10/04/88

ATTN: Mr. Fred Walker

RE: Waste Water From Stream
P.O.# 27299 Sample# ILA021
Sample Date: 09/02/88
Date Received: 09/06/88
GCL Number: 139455

GCL #	PARAMETERS	ANALYST	RESULTS
139455	Antimony, Total	jes <	0.500 mg/l
139455	Arsenic, Total	dbb <	0.016 mg/l
139455	Beryllium, Total	jes <	0.002 mg/l
139455	Cadmium, Total	el <	0.004 mg/l
139455	Chromium, Total	el <	0.020 mg/l
139455	Copper, Total	el <	0.020 mg/l
139455	Cyanides, Total	dji <	0.04 mg/l
139455	Lead, Total	jlb <	0.004 mg/l
139455	Mercury, Total	nk <	0.0005 mg/l R
139455	Nickel, Total	el <	0.020 mg/l
139455	Phenols	man	0.014 mg/l
139455	Selenium, Total	dbb <	0.008 mg/l
139455	Silver, Total	prw <	0.02 mg/l
139455	Thallium, Total	jes <	0.300 mg/l
139455	Zinc, Total	jmf	0.067 mg/l



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ANALYTICAL REPORT **COPY**

TO: MAECORP, Inc.
17450 South Halsted Street
Homewood, IL 60430

ATTN: Mr. Fred Walker

DATE: September 27, 1988

RE: Waste Water From Stream
Sample ILA021 P.O.#27299
Sample Date: 09/02/88
Date Received: 09/06/88
GCL#: 139455

PARAMETER	RESULT	DETECTION LIMIT
alpha-BHC	BDL	0.05 ug/l U
beta-BHC	BDL	0.05 ug/l U
delta-BHC	BDL	0.05 ug/l U
gamma-BHC (Lindane)	BDL	0.05 ug/l U
Heptachlor	BDL	0.05 ug/l U
Aldrin	BDL	0.05 ug/l U
Heptachlor epoxide	BDL	0.05 ug/l U
Endosulfan I	BDL	0.05 ug/l U
Dieldrin	BDL	0.10 ug/l U
4,4'-DDE	BDL	0.10 ug/l U
Endrin	BDL	0.10 ug/l U
Endosulfan II	BDL	0.10 ug/l U
4,4'-DDD	BDL	0.10 ug/l U
Endosulfan sulfate	BDL	0.10 ug/l U
4,4'-DDT	BDL	0.10 ug/l U
Methoxychlor	BDL	0.5 ug/l U
Endrin ketone	BDL	0.10 ug/l U



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DATE: September 27, 1988

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Sample ILA021 P.O.#27299
Sample Date: 09/02/88
Date Received: 09/06/88
GCL#: 139455

PARAMETER	RESULT	DETECTION LIMIT
alpha-Chlordane	BDL	0.5 ug/l U
gamma-Chlordane	BDL	0.5 ug/l U
Toxaphene	BDL	1.0 ug/l U
Aroclor 1016	BDL	0.5 ug/l U
Aroclor 1221	BDL	0.5 ug/l U
Aroclor 1232	BDL	0.5 ug/l U
Aroclor 1242	BDL	0.5 ug/l U
Aroclor 1248	BDL	0.5 ug/l U
Aroclor 1254	BDL	1.0 ug/l U
Aroclor 1260	BDL	1.0 ug/l U
PCBs, Total	BDL	1.0 ug/l U



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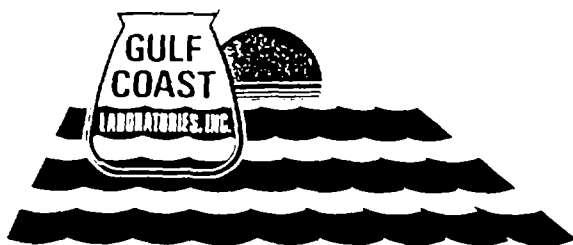
TO: MAECORP, Inc.
17450 South Halsted Street
Homewood, IL 60430

ATTN: Mr. Fred Walker

DATE: September 27, 1988

RE: Waste Water From Stream
Sample ILA021 P.O.#27299
Sample Date: 09/02/88
Date Received: 09/06/88
GCL#: 139455

VOLATILE COMPOUNDS	RESULT	DETECTION LIMIT
Chloromethane	BDL	10 ug/l U
Bromomethane	BDL	10 ug/l U
Vinyl Chloride	BDL	10 ug/l U
Chloroethane	BDL	10 ug/l U
Methylene Chloride	54	5 ug/l
Acetone	25	10 ug/l
Carbon Disulfide	BDL	5 ug/l U
1,1-Dichloroethene	BDL	5 ug/l U
1,1-Dichloroethane	BDL	5 ug/l U
1,2-Dichloroethene (total)	52	5 ug/l
Chloroform	BDL	5 ug/l U
1,2-Dichloroethane	BDL	5 ug/l U
2-Butanone	BDL	10 ug/l U
1,1,1-Trichloroethane	5	5 ug/l
Carbon Tetrachloride	BDL	5 ug/l U
Vinyl Acetate	BDL	10 ug/l U
Bromodichloromethane	BDL	5 ug/l U



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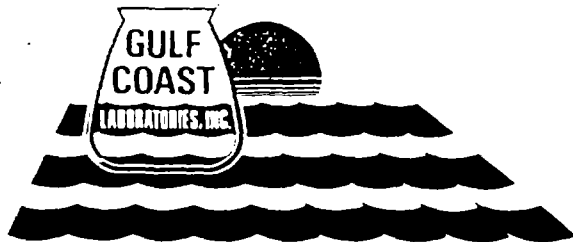
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RE: Waste Water From Stream
Sample ILA021 P.O.#27299
Sample Date: 09/02/88
Date Received: 09/06/88
GCL#: 139455

VOLATILE COMPOUNDS	RESULT	DETECTION LIMIT
1,2-Dichloropropane	BDL	5 ug/l U
Cis-1,3-Dichloropropene	BDL	5 ug/l U
Trichloroethene	19	5 ug/l
Dibromochloromethane	BDL	5 ug/l U
1,1,2-Trichloroethane	BDL	5 ug/l U
Benzene	BDL	5 ug/l U
Trans-1,3-Dichloropropene	BDL	5 ug/l U
Bromoform	BDL	5 ug/l U
4-Methyl-2-Pentanone	BDL	10 ug/l U
2-Hexanone	BDL	10 ug/l U
Tetrachloroethene	BDL	5 ug/l U
1,1,2,2-Tetrachloroethane	BDL	5 ug/l U
Toluene	BDL	5 ug/l U
Chlorobenzene	BDL	5 ug/l U
Ethylbenzene	BDL	5 ug/l U
Styrene	BDL	5 ug/l U
Xylene	BDL	5 ug/l U

[illegible]



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DATE: September 27, 1988

RE: Waste Water From Stream
Sample ILA021 P.O.#27299
Sample Date: 09/02/88
Date Received: 09/06/88
GCL#: 139455

TENTATIVELY IDENTIFIED COMPOUNDS

No Volatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any priority pollutants, surrogates or internal standards.



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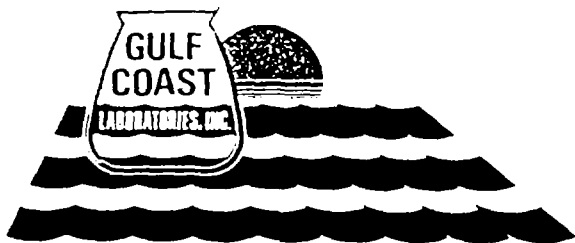
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RE: Waste Water From Stream
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Sample Date: 09/02/88
Date Received: 09/06/88
GCL#: 139455

SEMIVOLATILE COMPOUNDS	RESULT	DETECTION LIMIT
Phenol	BDL	10 ug/l U
bis(-2-Chloroethyl)Ether	BDL	10 ug/l U
2-Chlorophenol	BDL	10 ug/l U
1,3-Dichlorobenzene	BDL	10 ug/l U
1,4-Dichlorobenzene	BDL	10 ug/l U
Benzyl Alcohol	BDL	10 ug/l U
1,2-Dichlorobenzene	BDL	10 ug/l U
2-Methylphenol	BDL	10 ug/l U
bis(2-chloroisopropyl)Ether	BDL	10 ug/l U
4-Methylphenol	BDL	10 ug/l U
N-Nitroso-Di-n-Propylamine	BDL	10 ug/l U
Hexachloroethane	BDL	10 ug/l U
Nitrobenzene	BDL	10 ug/l U
Isophorone	BDL	10 ug/l U
2-Nitrophenol	BDL	10 ug/l U
2,4-Dimethylphenol	BDL	10 ug/l U
Benzoic Acid	BDL	50 ug/l U
bis(-2-Chloroethoxy)Methane	BDL	10 ug/l U
2,4-Dichlorophenol	BDL	10 ug/l U



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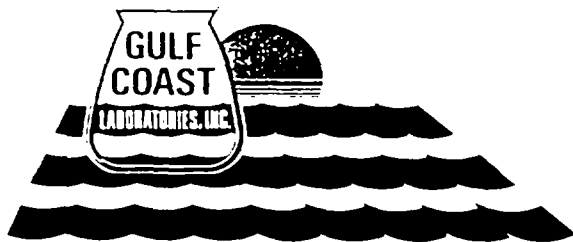
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Sample Date: 09/02/88
Date Received: 09/06/88
GCL#: 139455

SEMIVOLATILE COMPOUNDS	RESULT	DETECTION LIMIT
1,2,4-Trichlorobenzene	BDL	10 ug/l U
Naphthalene	BDL	10 ug/l U
4-Chloroaniline	BDL	10 ug/l U
Hexachlorobutadiene	BDL	10 ug/l U
4-Chloro-3-Methylphenol	BDL	10 ug/l U
2-Methylnaphthalene	BDL	10 ug/l U
Hexachlorocyclopentadiene	BDL	10 ug/l U
2,4,6-Trichlorophenol	BDL	10 ug/l U
2,4,5-Trichlorophenol	BDL	50 ug/l U
2-Chloronaphthalene	BDL	10 ug/l U
2-Nitroaniline	BDL	50 ug/l U
Dimethyl Phthalate	BDL	10 ug/l U
Acenaphthylene	BDL	10 ug/l U
2,6-Dinitrotoluene	BDL	10 ug/l U
3-Nitroaniline	BDL	50 ug/l U
Acenaphthene	BDL	10 ug/l U
2,4-Dinitrophenol	BDL	50 ug/l U
4-Nitrophenol	BDL	50 ug/l U
Dibenzofuran	BDL	10 ug/l U



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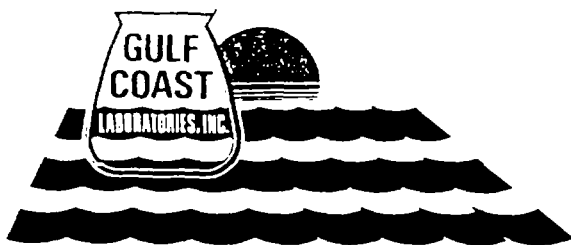
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SEMIVOLATILE COMPOUNDS	RESULT	DETECTION LIMIT
2,4-Dinitrotoluene	BDL	10 ug/l U
Diethylphthalate	BDL	10 ug/l U
4-Chlorophenyl-phenylether	BDL	10 ug/l U
Fluorene	BDL	10 ug/l U
4-Nitroaniline	BDL	50 ug/l U
4,6-Dinitro-2-Methylphenol	BDL	50 ug/l U
N-Nitrosodiphenylamine (1)	BDL	10 ug/l U
4-Bromophenyl-phenylether	BDL	10 ug/l U
Hexachlorobenzene	BDL	10 ug/l U
Pentachlorophenol	BDL	50 ug/l U
Phenanthrene	BDL	10 ug/l U
Anthracene	BDL	10 ug/l U
Di-n-Butylphthalate	1	10 ug/l J
Fluoranthene	BDL	10 ug/l U
Pyrene	BDL	10 ug/l U
Butylbenzylphthalate	BDL	10 ug/l U
3,3'-Dichlorobenzidine	BDL	20 ug/l U
Benzo(a)Anthracene	BDL	10 ug/l U
Chrysene	BDL	10 ug/l U

(2) Screened by MC4 108, 107, 79 Ion Search



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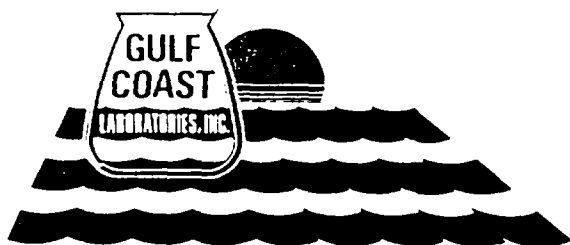
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TENTATIVELY IDENTIFIED COMPOUNDS

Thirteen (13) Semivolatile Compounds greater than 10% of the nearest internal standard were tentatively identified by mass spectral library search. This is exclusive of any priority pollutants, surrogates or internal standards.

SEMIVOLATILE COMPOUND	RETENTION TIME	ESTIMATED CONCENTRATION
Unknown	6.62	10 ug/l J B
1,1,2,2-Tetrachloroethane	8.52	6 ug/l J
Unknown	8.66	48 ug/l J B
Unknown	8.98	10 ug/l J
Unknown	9.43	80 ug/l J
Unknown	12.51	7 ug/l J
Unknown	17.11	6 ug/l J
Unknown	17.40	6 ug/l J
Unknown	17.60	6 ug/l J
Unknown	24.18	5 ug/l J
Unknown	28.84	17 ug/l J
Unknown	36.78	6 ug/l J
Unknown	37.42	5 ug/l J



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- + - Correlation coefficient for MSA < 0.995
- @ - Due to matrix interference, post analytical spike is out of control limits.
- X - Result by calculation

PROJECT LOCATION		NAME OF CLIENT		PROJECT TELEPHONE NUMBER		PROJECT NUMBER						
North Chicago		Northern Trust Bank				ILAOZ1						
ITEM NUMBER	SAMPLE NUMBER	NUMBER & SIZE OF CONTAINERS	DESCRIPTION			TRANSFER NUMBER & CHECK						
						1	2	3	4	5	6	7
1	ILAOZ1	2 gal Jars 2 qt Jars 3 VOA Vials	Liquid Water Stream Send results to Freddie Walker c/o MAECORP PO# 27299-ILAOZ1									
Person Responsible for Sample				Affiliation	Date	Time	TRANSFER NUMBER	ITEM NUMBER	TRANSFERS RELINQUISHED BY	ACCEPTED BY	DATE	TIME
Katie Dignan				MAECORP	9/2/94	4:00 PM	1	1	Katie Dignan			
Purpose of analysis (use back of front sheet if necessary)							2					
Priority Pollutants 2-3 weeks Turn Around							3					
							4					
							5					
							6					
							7					